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FIRES ON FARMS

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Fire of undetermined origin destroyed the barn, the granary, the silo, and the machine shed on the John Smith farm, 3 miles west of here, yesterday. Only the prompt arrival and effective work of fire-fighting apparatus from near-by towns saved the home. Ten cows, four horses, all hay, ensilage, grain, and machinery were also destroyed. This fire represents a loss of about $20,000, covered by but a few thousand dollars of insurance.

The above is a news item from a country paper. It describes a serious loss to one unfortunate farmer—only one among thousands of farmers in the United States who suffered similar losses during the year. The loss caused by fires on farms in the United States in 1929 has been estimated at approximately 3,500 lives and $100,000,000 worth of property. Owing to economic conditions the property loss from farm fires in 1931 increased from 10 to 20 per cent over the 1929 figure.

CAUSES OF FARM FIRES

Farm fires have numerous causes. Here are eight of the principal ones: Spontaneous ignition or self-ignition of hay and other products; lightning; defective chimneys and flues; sparks on combustible roofs; careless use of matches, smoking; careless use and storage of gasoline and kerosene; defective heating equipment; faulty wiring and improper use of electric appliances. These eight causes are responsible for more than two-thirds of the estimated annual loss. The rest is ascribed to 12 miscellaneous causes that are known, and to unknown or undetermined causes.

REDUCE FIRE HAZARDS AND LOSS

PREVENT SPONTANEOUS IGNITION OF HAY

Cure hay properly before storing it; hay cut and cured in the field, on which rain or dew has fallen, should again be well cured before it is stored.

Adding salt at the rate of 0.5 per cent by weight to damp or undercured hay as it is placed in the barn or in stacks will retard fermentation and may prevent spontaneous ignition. Too much reliance should not be placed on this use of salt, however, and it should not be considered a substitute for proper curing.

Ventilate hay freely immediately after it has been stored. Hay that has become very hot, however, should not be ventilated.

Guard against leaks in the roofs and sides of barns.

Hay in the mow or stack should be examined frequently if there is any suspicion about its condition. If the hay, a few feet from the surface, is so hot that the hand can not be held in it, examine the condition of the interior thoroughly. First place planks on top of the hay to insure firm footing; the interior may have charred and sunk so much that it would be dangerous to walk directly on the hay. Water should be applied to the areas that are heating to cool them. Wet the hot hay thoroughly before removing it from the mow, otherwise it may burst into flames as soon as it is exposed to the air. Place this hay in an open field; it may ignite later.

PROTECT AGAINST LIGHTNING

Equip the principal farm buildings with properly installed and well-maintained lightning rods. Statistics show that such systems are practically 100 per cent effective in preventing damage from lightning. A substantial metal roof with all its parts in good electrical contact and properly grounded also affords good protection against lightning.

Protect livestock in pastures or yards by grounding all wire fences at reasonable intervals.

CONSTRUCTION AND CARE OF CHIMNEYS AND FLUES

Chimneys should be built from the ground up or should rest on foundation or basement walls of masonry. Chimney walls should be of brick or stone.

Avoid long smoke pipes. Smoke pipes should not pass through floors, closets, or concealed locations.

Clean chimneys, flues, and smoke pipes at least once a year.

USE FIRE-RESISTANT ROOFING MATERIAL

Use good fire-resistant roofing material. If wooden shingles are used, choose the best grade of edge-grain shingles and insist upon good workmanship in laying them.

USE CARE WITH MATCHES AND IN SMOKING

Use only safety matches on the farm; keep matches away from children; do not permit smoking in barns or near combustible materials.

HANDLE GASOLINE AND KEROSENE WITH CARE

Never use gasoline or kerosene to start or revive a fire in a stove or furnace. Do not use gasoline, benzine, naphtha, or other flammable liquids for cleaning at home. Never fill lamps, lanterns, stoves, or heaters while they are burning.

Never store gasoline or kerosene in open containers in any building. Small quantities of gasoline should be kept in sealed containers or safety cans, but not in quantities greater than 1 gallon. Large quantities of gasoline should be stored in substantially constructed steel drums holding not more than 60 gallons, and placed at least 75 feet from the nearest building, or in approved underground tanks at least 10 feet from the nearest building.

Only small quantities of kerosene should be stored in buildings and then only in closed containers or substantial drums kept at a safe distance from any heating equipment. Large quantities of kerosene should be stored outside buildings in substantial drums or in underground tanks. Drums or tanks in which gasoline or kerosene is kept should be equipped with pumps.

INSTALL AND OPERATE HEATING EQUIPMENT PROPERLY

See that heating equipment is properly installed, operated, and maintained. Overheating is dangerous.

Boilers and furnaces should rest on incombustible foundations. Wooden floors under cooking or heating stoves should be adequately protected with incombustible material. Stoves and ranges should be several feet from woodwork or from wooden lath and plaster partitions.

USE CARE WITH ELECTRICITY AND ELECTRIC APPLIANCES

See that electrical wiring meets the requirements of the National Electrical Code.

Be careful not to overload electrical circuits.

Use fuses of the correct amperage, so that the safe current-carrying capacity of the wire will not be exceeded. Disconnect flatirons, curling irons, and heating pads when they are not in use.

DISPOSE OF WASTE AND RUBBISH

Keep the premises free from litter and rubbish. Burn oily waste and rags or place them in metal receptacles—they may ignite spontaneously.

Do not pile horse manure in stables or against buildings—it may heat enough to cause a fire.

PROVIDE FIRE-PROTECTIVE APPARATUS

Eliminate all the fire hazards that can be eliminated, but be prepared to fight fires in case they do occur. Ladders, axes, chemical extinguishers, water pails, and barrels or tanks equipped with pumps should be available on every farm. A pressure system is a desirable water supply.

Rural communities should have adequate motorized fire apparatus and trained volunteer fire departments.

The Department of Agriculture will, on request, glady furnish available information on prevention of farm fires.

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